



Written Response Test

Marking scheme

8th International Geography Olympiad

Taipei, Taiwan

July 29 - August 4 2010

Marking scheme - overview

1 MDGs	2 Flood	3 Population geography	4 Landforms	5 Agriculture	6 Natural hazards
1 - 3m	1 - 3m	1 - 3m	1 - 1m	1 - 3m	1 - 3m
2 - 2m	2 - 4m	2 - 2m	2 - 1m	2 - 3m	2 - 3m
3 - 2m	3 - 2m	3 - 3m	3 - 1m	3 - 1m	3 - 3m
4 - 2m	4a - 1m	4a - 2m	4 - 1m	4 - 1m	4 - 6m
5 - 3m	4b - 3m	4b - 2m	5a - 1m	5 - 2m	
		5 - 2m	5b - 2m	6 - 3m	
			6 - 1m		
			7 - 2m		
			8 - 3m		
12 marks	13 marks	14 marks	13 marks	13 marks	15 marks

Marking

Q	Answers	Marks
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Section I - Millennium Development Goals (MDGs)

1 3 marks (any 3 of four)

- Achieve universal primary education
- Eradicate extreme poverty and hunger
- Promote gender equality and empower women
- Global partnership for development

2 2 marks (2 full reasons)

Status of women in the community improves.

The target is to eliminate gender disparities in education.

Children learn from their mothers so learning about finance is given to the next generation.

It gives them hope and they start to save money.

3 2 marks (4x½)

Micro-loans are used for any **four** of the following answers:

- food production
- small manufacturing
- to buy cattle or sheep
- to repair a house
- to buy small tools

or any other valid answer. It does not specifically say 'in Burkina Faso'

4 2 marks (-1 for each country not mentioned)

- Bangladesh
- Nicaragua
- Sudan

5 3 marks (3 x 1)

- Canada is a prosperous country in need of low skilled workers 1
- Germany is a country with an ageing population in need of all kind of workers 1
- Workers in either of these countries do not want to do manual work 1
- Kuwait is a very small, rich and sparsely populated country in need of workers for the oil industry and for domestic work 1

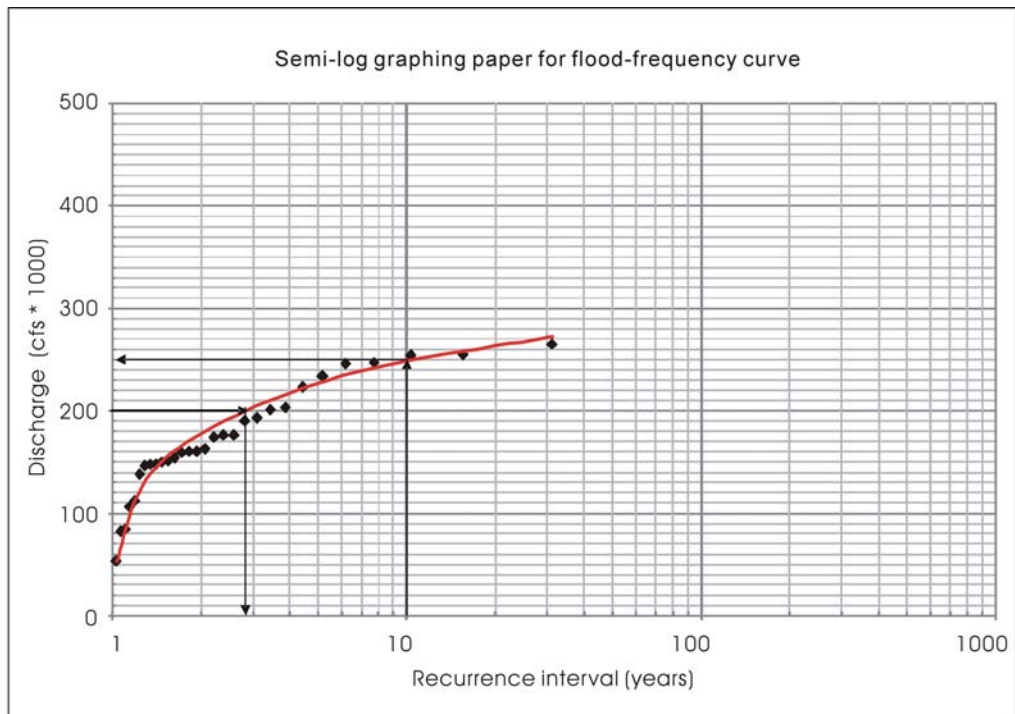
Any other valid reason

Section II - Flood

1 3 marks

see Source 1 (1925 = 1.19, 1938 = 3.10, 1944 = 15.50)

2 4 marks (3 marks for accuracy of points + 1 for best fit line)



3 2 marks

(marking will take into account students' best-fit curve and answers)

- 250,000 cfs
- 2.9 years

1
1

4a 1 mark

Any interpretation of

- Observation: 7 of the top 10 discharges occur during the last decade.
- The majority of the higher discharges occur in the most recent years.

1

4b 3 marks

Possible causes are: **(3 x1)**

- deforestation in the river basin
- draining of marshes along the river
- removing obstacles (dredging) in the stream
- urbanisation of the river banks (impermeable surfaces)
- increased rainfall

any other valid answer

Q	Answers	Marks
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Section III - Population Geography

1 3 marks (3 x 1)

This should be descriptions of the pyramids, eg.

- changes from large population under 30 years of age in 1960 to projected majority of over 40 in 2050
 - life expectancy increased from 52.4 to 78.3
 - fertility rate decreased from 6.2 to 1.08
 - population has increased from 25m to 47m etc.
- any other valid answer

2 2 marks

South Korea's transition from an aging to a super-aged society has been rapid, with either the time taken or the years it happens/happened quoted.

It is not enough to just say 'rapid', as students have been told to support their answer with data.

E.g.: transition is only expected to take 26 years - or broken down into its 2 steps - 18 + 8 years. Or: transition is rapid, becoming an aging society in 2000 and a super-aged society by 2026.

3 3 marks

- Speed: The transition was much more rapid than for Western countries, e.g. South Korea 26 years, France 154 years, USA 94 years. Or, South Korea's transition is taking a generation, Western countries took decades 1
- Date of onset: The transition started much later than that for Western countries, e.g. South Korea became an aging society in 2000, France in 1864, Germany in 1932 1
- Japan and Korea (Asia) similar as compared to Europe/USA (Western) 1

4a 2 marks

- Civilisation illnesses, e.g. obesity, high blood pressure, diabetes, heart attack **(2x½)**
- Main causes, e.g. lack of physical activity, wrong eating patterns, air pollution, stress **(2x½)**

4b 2 marks

- Parasite and infectious diseases, e.g. malaria, cholera, yellow fever, tuberculosis etc. **(2x½)**
- Main causes, e.g. lack of fresh and clean water, poor health service, low hygiene standards, insects transmitting diseases, low awareness of threats and ways of preventing infection **(2x½)**

5 2 marks (2x1)

Two of the following answers:

- High mobility of people being a result of increased tourism and business travels, popularity of air transportation
- Growing number of people
- Mutations and resilience of viruses due to common antibiotics use

Q	Answers	Marks
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Section IV - Land forms

1 1 mark (2 x 1/2 from these three)

- A
- E
- F

2 1 mark (2 x 1/2)

- B
- C
- D

3 1 mark

- b (sill)

4 1 mark

- b (wadi)

5 3 marks

a: barchans

1

b: description of process below :

2

- The wind blows consistently from one direction
- sand collects around a small obstruction
- sand piles up with the arms of the barchan parallel to the wind direction

6 1 mark (2x1/2)

Are students going to recognise this as a loess area?

China, Midwestern United States (with very thick loess deposits)

Suggest take other answers such as South West USA and Central Asia

7 2 marks

- b – with basalt columns in the picture
- c – igneous rock

1

1

8 3 marks

- geyser
- forms in a volcanic area
- ground water comes into contact with magma below the earth's surface which is at a high temperature
- The water boils and turns to steam
- Pressure increases and the water column on top of the steam is forced out of the cavity at regular intervals as a 'spout' or fountain of hot water.

1

1

1

Q	Answers	Marks
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Section V - Agriculture and environment

1 3 marks (3 x 1)

- most of farm holdings less than 1 ha in size
- decreasing average size of holdings.
- only 1% of holdings are greater than 10ha in size
- primitive subsistence farming any other valid observation

2 3 marks

An example of elements of a right vicious circle is:

Poverty - No money to buy fertilizers/pesticides et cetera - Low yields -
 Low income - Bad health - Low output/workforce - Poverty

Every component missing under 5 is 1 mark less.

3 1 mark

- retaining walls have to be built to enclose the water 1
- transporting water to the fields from wells, or reservoirs can be expensive 1
- Water must be shared out between all the farmers so all get a fair share. 1

4 1 mark

massive deforestation

5 2 marks (2 x 1)

- lack of energy resources (therefore, wood is used as charcoal)
- population growth (overpopulation / pressure on natural resources, including forests; need for jobs etc)
- population poverty (wood as the only source of income for many people)

6 3 marks (3 x 1)

- land and soil degradation
 - deterioration of hydrological balance (fresh water shortages in many places, including the capital, Port au Prince; underground resources will no longer be properly supplied by rainwater, as massive runoff will erode the slopes...)
 - increase of natural hazards effects
- any other valid answer

Section VI - Natural hazards

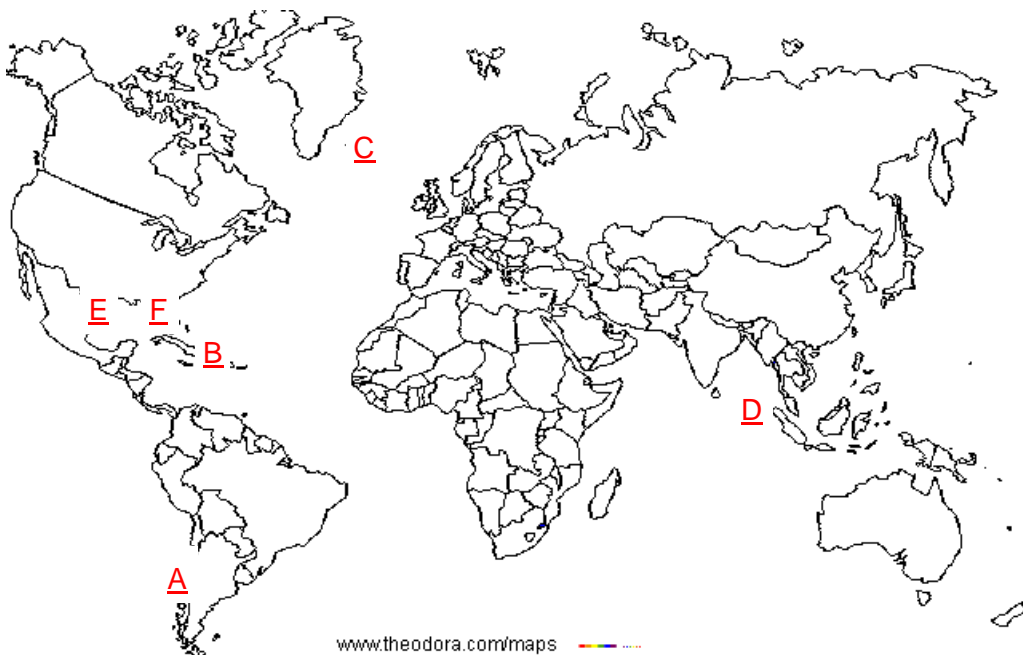
Disasters of the 21st century

1 3 marks (6x½)

Photo	Country and cause
A	Chile - earthquake, tsunami
B	Haiti - earthquake
C	Iceland - volcano eruption
D	Indonesia - earthquake, tsunami
E	USA - hurricane (Katrina) floods
F	USA - (Gulf of Mexico), oil platform explosion and spill

2 3 marks (6x½)

Locations of these disasters (A – F) on map.



Q	Answers	Marks
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3 3 marks (1 + 4x½)

- Earthquakes ... 1
- Four of the following: 2
 - cause tsunamis and landslides,
 - can have many aftershocks,
 - happen unexpectedly,
 - affect large areas,
 - demolish buildings and infrastructures,
 - failure of infrastructures interferes with rescue operations.

4 6 marks (2 x 0.5 marks)

Note :

Disasters must be of different origin

Only two disasters should be chosen and then 2 effects in each box.

Disaster	Effects on local ...		
	... population	... environment	... economy
A	Death, injuries, homelessness, diseases, lack of fresh water, food and medications, psychological trauma, prison escapes, riots	Decrease in number of plants and animals, destruction of habitats, floods, contamination, pollution from broken infrastructures	Loosing income, repairing buildings, factories and infrastructures
B	Death, injuries, homelessness, diseases, violence, lack of fresh water, food and medications, psychological trauma	Decrease in number of plants and animals, destruction of habitats, floods, contamination, pollution from broken infrastructures	Loosing income, repairing buildings and infrastructures
C	Evacuation because of ash, smothering, loosing homes and property, fires	Changes on temperature (clouds, less sunshine), alkaline rains, ash rains, changes in soil, smothering plants, fires	Reparations of infrastructure, flights cancelled, all other sorts of transportation used, people did not make it to their jobs

Q	Answers			Marks
D	Death, injuries, homelessness, diseases, lack of fresh water, food and medications, psychological trauma, panic	Contamination of fields with salt water, changes in the sea-bottom, washed away sands, impact on mangroves, coral reefs, forests, wetlands and dunes, groundwater	Loss of fisheries, unemployment, decrease in tourism	
E	Evacuation, death, injuries, looting, homelessness, psychological trauma, largest diaspora in the USA	Forest lands destroyed, beach erosion, loss of habitats, breeding areas, loss of marshes, oil spills, contaminated water pumped to a lake	Expensive reconstruction works in Gulf of Mexico – transportation and oil platforms, missing crops, unemployment, no taxes, increased insurances	
F	Affects people who are living on the beach, cannot swim	Impact on marine and coastal habitats, long-term food chain changes, eggs do not develop	Closing down fisheries, decrease in tourism, collecting oil, taking precautionary measures	

* The response is not all inclusive.